

with pressure and with a temperature of above the melting point of the polymer, for a sealing period, which process comprises:

bringing first area of said two laps into contact along predetermined lines, with pressure and at a temperature above the melting point of the weldable polymer, with a sealing unit comprising a first heated sealing head and a second heated sealing head, the second sealing head being arranged or configured on a side of the pack material facing away from said first sealing head, and said sealing heads having, in succession in a direction of advance, identical first and second contact area structures corresponding to the predetermined weld lines, with the length of one contact area structure in a direction of advance corresponding to an advancement cycle;

advancing the pack material; and

applying pressure and heat to said first area of said laps with said second contact area of said sealing head, and simultaneously bringing second areas of said laps into contact along predetermined lines, with pressure and at a temperature above the melting point of the weldable polymer, with said first contact area of said sealing head.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) Device for performing the process according to Claim 1, comprising a transport device for the pack material and a sealing unit comprising a first heated sealing head and a second cooperating, heated sealing head, the second sealing head being arranged or configured on the side of the pack material facing away from the first sealing head, and said sealing heads having, in succession in the direction of advance, two or more identical

contact area structures corresponding to the predetermined weld lines for transmitting temperature and pressure to the pack material, with the length of one contact area structure in the direction of advance corresponding to the advancement cycle.

5. (Canceled)

6. (Currently Amended) Process for producing hot-seal packs for transdermal therapeutic systems, by transporting, in a predetermined cycle through a sealing unit, two laps, a first lap and a second lap, of continuous pack material composed of two or more layers, the first lap having a weldable polymer layer lying against the second lap, and the second lap having a weldable polymer layer lying against the first lap, said process comprising:

pressing first areas of said laps together, at a first sealing station, with a first heated sealing tool, to produce a temperature [slightly] above the melting point of the polymer in said laps;

advancing the pack material to bring said first areas of said laps to a second sealing station;

pressing said first areas of said laps together, at said second sealing station, with a second heated sealing tool, to produce a temperature [slightly] above the melting point of the polymer in said laps, and to complete one or more welds between said first and second laps along predetermined lines in said first areas of said laps;

while said first areas of said laps are being pressed at said second sealing station, pressing second areas of said laps together, at said first sealing station, with said first heated sealing tool, to produce a temperature [slightly] above the melting point of the polymer in said second areas of said laps;

advancing the pack material to bring said second areas of said laps to said second sealing station; and

pressing said second areas of said laps together, at said second sealing station, with said second heated sealing tool, to produce a temperature [slightly] above the melting point of the polymer in said laps and to complete one or more welds between said first and second laps along predetermined lines in said second areas of said laps.

7. (Currently Amended) Process according to claim 6, wherein said polymer layer comprises high density polyethylene having a melting point of about [140]138°C and said first heated sealing [surface] head has a temperature of about [170]169°C.

8. (Currently Amended) Process according to claim 6, wherein said second heated sealing [surface] head has a temperature of about [70]65°C.

9. (Currently Amended) Process according to claim 6, wherein said polymer layer comprises polyacrylonitrile having a melting point of about [175]177°C and said first heated sealing [surface] head has a temperature of about 200°C.

10. (Currently Amended) Process according to claim 9, wherein said second heated sealing [surface] head has a temperature of about [200]80°C.

11. (Previously Added) Device for performing the process according to claim 6, comprising a sealing unit with heated sealing tools and a transport device for the pack material, wherein the sealing unit comprises at least one sealing head having, in succession in the direction of advance, two or more identical contact area structures corresponding to the predetermined weld lines for transmitting temperature and pressure to the pack material, with the length of one contact area structure in the direction of advance corresponding to the advancement

cycle.

12. (Previously Added) Device according to claim 11 wherein the sealing unit comprises a first and a second cooperating, heated sealing head the second sealing head being arranged or configured on the side of the pack material facing away from the first sealing head.

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